Agenda Item No E-5

DATE SUBMITTED 06/12//2015

SUBMITTED BY Public Serv. Dir .

DATE ACTION REQUIRED 06/17/2015

CITY COUNCIL ACTION (X)
PUBLIC HEARING REQUIRED ( )
RESOLUTION ( )
ORDINANCE 1ST READING ( )
ORDINANCE 2ND READING ( )

IMPERIAL CITY COUNCIL
AGENDA ITEM

SUBJECT: **DISCUSSION/ACTION: HIGHWAY 86/NECKEL ROAD WATER & WASTEWATER LINE DESIGN-AMENDMENT NO. 1**

1. APPROVE AMENDMENT NO. 1 TO CONTRACT WITH WEBB ASSOCIATES TO INCLUDE GEOTECHNICAL STUDY AS REQUIRED BY CALTRANS.

DEPARTMENT INVOLVED: Public Services

BACKGROUND/SUMMARY:

At the March 18, 2015 Council meeting, a proposal submitted by Webb Associates for engineering services for several water and wastewater projects was approved. One of the items is the Neckel Road Water and Sewer line design across Hwy.86. Recently, the consultant notified the city that Caltrans requires a geotechnical report as part of the permit application. Webb has submitted an amendment to the contract to include this study. The cost is $13,150.00 for this amendment. The original contract is $141,993.00 and with the amendment will bring the cost to $155,143.00.

FISCAL IMPACT: $13,150.00 from Water and Wastewater Bond Monies

STAFF RECOMMENDATION: Staff recommends that City Council approve Amendment 1.

MANAGER'S RECOMMENDATION: MANAGER'S INITIALS *MDB*

MOTION:

SECONDED:
AYES:
NAYES:
ABSENT:

APPROVED ( ) REJECTED ( )
DISAPPROVED ( ) DEFERRED ( )

REFERRED TO:

ALBERT A. WEBB ASSOCIATES

Corporate Headquarters
3788 McCray Street
Riverside, CA 92506
951.686.1070

Palm Desert Office
36-951 Cook Street #103
Palm Desert, CA 92211
760.568.5005

Murrieta Office
41391 Kalmia Street #320
Murrieta, CA 92562
951.686.1070

WO: 15-0107

June 9, 2015

Mr. Jackie Loper
Community Development Director
City of Imperial – Public Works
420 S. Imperial Avenue
Imperial, CA 92251

RE: Neckel Rd Water and Sewer line Design Across HWY 86 – Proposed Contract Amendment 1

Dear Mr. Loper:

As we have discussed over the phone, Caltrans requires a geotechnical report to be submitted with the permit application for the subject project. The preparation of the geotechnical report was not included in our original scope of work for this project but is essential for the project to continue. We have acquired a quote from LandMark Consultants, Inc. who we have worked with on multiple projects for the City of Imperial. We respectfully request an amendment be made to the project scope and budget for the following requested tasks:

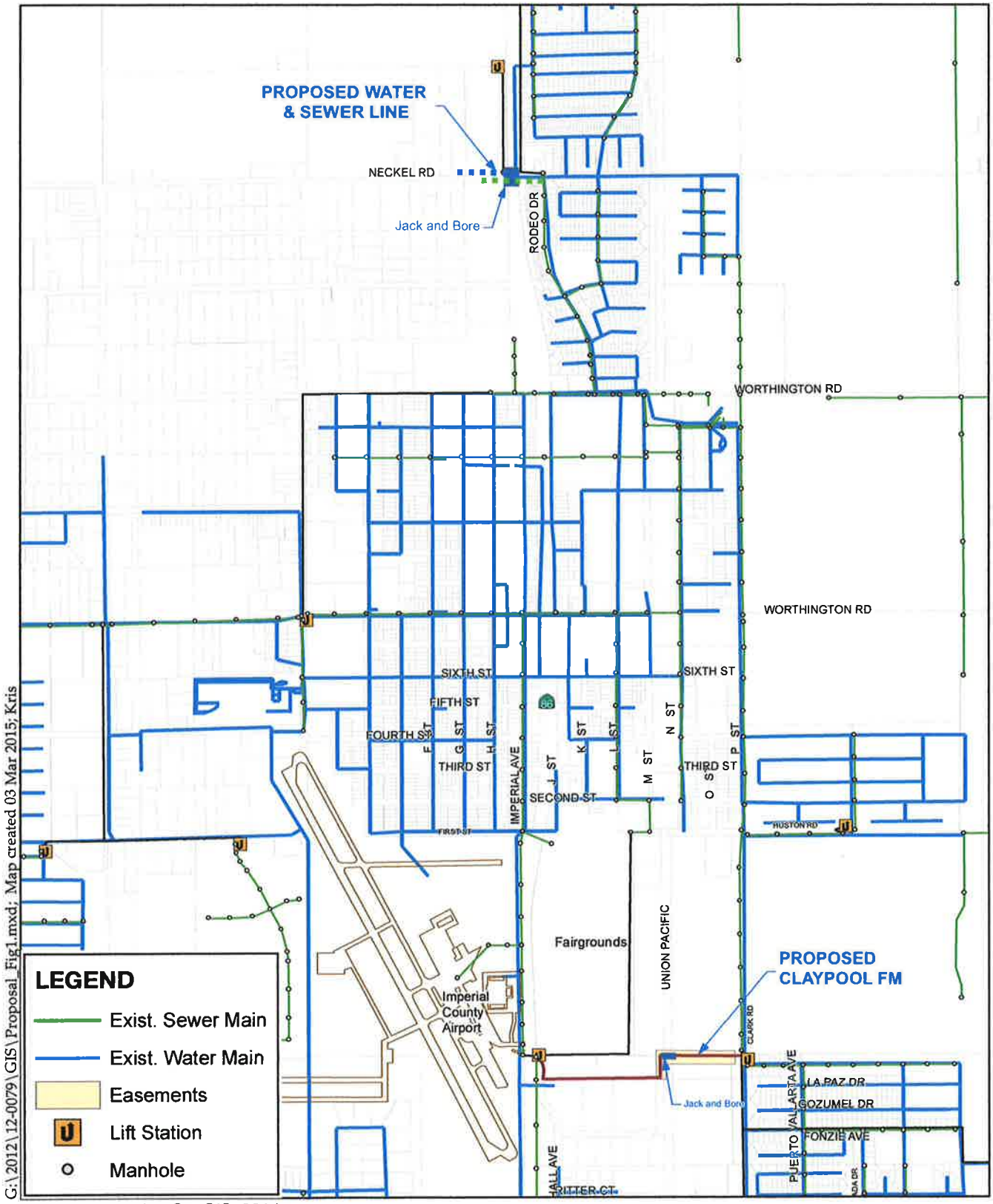
- Geotechnical Field Exploration – drilling two (2) borings to a depth of 25 ft below ground surface at general location of jack and bore pits. Sample soil for classification and prep holes for groundwater level measurements.
- Laboratory Testing – particle size analysis, plasticity index, direct shear strength, moisture contents, moisture-density relationship, and chemical analysis
- Monitoring Well Pump Test – a pump test will be conducted on each of the monitoring wells to obtain information for dewatering of the jack and bore pits
- Engineering Analysis and Report – A copy of the geotechnical report will be provided for both the Caltrans permit application and the construction specifications

The cost associated with the above mentioned tasks is $13,150.00. The original contract amount for engineering and construction management services for both the water and sewer lines in Neckel Rd. is $141,993.00 and will increase to $155,143.00 with the approval of this contract amendment. Should you have any questions regarding this request, please feel free to contact me.

Sincerely,
ALBERT A. WEBB ASSOCIATES

Shane Bloomfield, P.E.
Senior Engineer

cc: Kris Danielson, AAWA



Sources: Riverside Co. GIS, 2014; Eagle Aerial, April 2012.

0 1,000 2,000 3,000 4,000 Feet

Figure 1 - Proposed Improvements

City of Imperial Wasterwater Upgrade

ALBERT A. WEBB ASSOCIATES

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March 3, 2015

Mr. Jackie Loper
Public Services Director
City of Imperial
420 S. Imperial Avenue
Imperial, CA 92251

RE: Proposal for Engineering Services for Claypool Force Main Design, Neckel Rd Water and Sewer line Design across HWY 86, & Water System Analysis

Dear Jackie,

Pursuant to your request Albert A. Webb Associates (Webb) has prepared the following proposal to provide engineering services for the subject projects. Webb's tasks will be to prepared final engineering plans and specifications ready for bidding and construction for the Claypool Force Main and the water/sewer line across HWY 86 along Neckel Road as shown on **Figure 1**. The plans will include all necessary civil, and structural engineering design information and will be signed by a registered engineer in the state of California. Webb will also prepare the necessary paperwork required by CEQA, it is assumed that these projects will qualify for Categorical Exemptions and no further environmental documentation or special studies will be required.

Webb's tasks for the Water System Analysis will include a hydraulic analysis of the water system on the west side of the City and provide recommendations to help increase pressures in the Monterey Park Area of the City. Based upon our understanding of the projects, Webb's scope of work will include the following tasks for each project:

SCOPE OF SERVICES

Claypool Force Main

The Claypool Lift Station is located at the south east corner of HWY 86 and Airport Road. Two force mains are used to convey wastewater to the north, from the lift station. The force main that crosses under HWY 86 has too much buildup to make it useful. A capacity analysis was prepared by Webb where three alternatives were evaluated. Based on the findings of the analysis, the City determined that Alternative 2, with some slight modifications, was the best solution for the long term. The proposed force main alignment will commence from the Claypool Lift Station and head south along Marshall Road to Claypool Drive. From the intersection of Marshall Avenue and Claypool Drive, the force main would head east to the Union Pacific Rail Road, continue north approximately 300 ft and continue east through an easement across private property. The force main will connect to the existing 21-inch gravity sewer line in Clark Road. The Clark Road gravity main travels north to the wastewater treatment plant. Engineering services proposed for Claypool force main is as follows.

1. Field topo by Holt Group including key shots of valve cans, manholes, telephone poles, curbs, ROW, property lines, easements, etc.
2. Evaluate lift station pumping capacity and facility conditions. Incorporate the required facility improvements into the project plans and specifications for construction.

3. Prepare plans, specifications and bid documents for construction. Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1" 4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.
4. Apply for Union Pacific permit (City to pay all fees)
5. Provide construction management services including:
    a. Responding to contractor RFIs
    b. Submittal review
    c. Field inspection
    d. Field visits during construction

Schedule and Compensation

It is anticipated that the design will be completed within 16 weeks after the execution of contracts, notice to proceed, and easement acquisition. These services will be performed on a lump sum basis not to exceed $99,767. A breakdown of the fee is included in the attached spreadsheet.

Neckel Road Waterline, Hwy 86 Crossing

A waterline is needed in Neckel Road to connect the waterlines on both sides of Hwy 86. The proposed12-inch diameter waterline in Neckel Road would commence at the intersection of Rodeo Dr and Neckel Rd and continue west along Neckel Road to the west side of Hwy 86 (approximately 500 lf). Permits from both Caltrans and the IID will be required for this project. Design and construction management services assumed for this project are as follows:

1. Field topo by Holt Group including key shots of valve cans, manholes, telephone poles, curbs, ROW, property lines, easements, etc.
2. Prepare plans, specifications and bid documents for construction. Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1" 4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.
3. Review construction bids and prepare recommendation for award
4. Prepare permit applications and associated documentation for Caltrans and IID encroachment permits (City to pay permit fees)
5. Provide construction management services including:
    a. Responding to contractor RFIs
    b. Submittal review
    c. Field inspection
    d. Field visits during construction

Schedule and Compensation

It is anticipated that this project will be completed within 20 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed $78,239. A breakdown of the fee is included in the attached spreadsheet.

Neckel Road Sewer Force Main, Hwy 86 Crossing

A sewer force main is needed in Neckel Road to connect the proposed lift station for the commercial developments on the west side of Hwy 86, just north of Neckel Road, to the existing 15-inch gravity line in Rodeo Rd. The proposed force main would be approximately 500 lf. Permits from both Caltrans and the IID will be required for this project. Design and construction management services assumed for this project are as follows:

1. Field topo by Holt Group including key shots of valve cans, manholes, telephone poles, curbs, ROW, property lines, easements, etc. . .

2. Prepare plans, specifications and bid documents for construction. Drawings will be prepared on 24" x 36" sheets for pipelines at 1"=40' horizontal scale and 1" 4' vertical scale showing all appropriate connection details and construction notes per City requirements and applicable jurisdiction requirements.
3. Review construction bids and prepare recommendation for award
4. Prepare permit applications and associated documentation for Caltrans and IID encroachment permits (City to pay permit fees)
5. Provide construction management services including:
    a. Responding to contractor RFIs
    b. Submittal review
    c. Field inspection
    d. Field visits during construction

Schedule and Compensation

It is anticipated that this project will be completed within 20 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed $63,754. A breakdown of the fee is included in the attached spreadsheet.

Water System Hydraulic Analysis (Monterey Park Area)

Low water pressures have been observed on the west side of town (Monterey Park Area) and the City has expressed interest in Webb reviewing the hydraulic model and providing recommendations for improvements. The assumed scope of work for this project is as follows:

1. Take field pressure readings at various locations on the west side of town
2. Review water delivery data from the Water Treatment Plant
3. Review development which has taken place since the Hydraulic Model was prepared and update the model
4. Calibrate and run the model
5. Review system performance and determine recommended improvements
6. Prepared summary letter report

Schedule and Compensation

It is anticipated that this project will be completed within 5 weeks after the execution of contracts and notice to proceed. These services will be performed on a lump sum basis not to exceed $9,056. A breakdown of the fee is included in the attached spreadsheet.

CONSTRUCTION SERVICES

Unless indicated elsewhere, the scope of construction services that Webb Associates will be providing for these projects are as follows:

1. Prepare bid addenda as necessary (assume 1 addendum)
2. Review contractor bids and proved recommendations for award
3. Respond to RFI's during bid period
4. Review contractor submittals
5. Attend a jobsite pre-construction meeting
6. Full time field inspection on pipeline projects
7. Perform three field visits during construction and one field visit to verify project performance and compliance with construction documents.
8. Provide telephone/email coordination during construction
9. Prepare record documents based upon contractor's redline markups

PROJECT TEAM

The primary personnel assigned to these projects will be as follows:

- Mr. Shane Bloomfield, PE (Senior Engineer) will serve as project manager and responsible engineer over all the projects.
- Mr. Brian Knoll, PE (Vice President) will serve as Principal-in-charge and will oversee the projects through completion.
- Mr. Kris Danielson, PE (Associate Engineer) will be the project engineer on these projects and will be responsible for overseeing the development of the design documents and project specifications.
- The Holt Group will provide survey and inspection services for the pipeline replacement projects.

EXCLUTIONS

The following items have been specifically excluded from Webb's scope of work for these projects.

1. City will be responsible to post and file the Notice of Exemption with the appropriate authority
2. Preparation of permit applications and paying for permits unless specifically indicated in the proposed scope of work
3. Construction staking and surveying during construction
4. Property acquisition
5. Material testing
6. Traffic control plans
7. Utility relocation plans
8. Preparation of easement documents

As detailed above, based upon each project's Scope of Work, our engineering services budget for these projects is as follows:

Project Name	**Budget**
Claypool Force Main	$ 99,767
Neckel Waterline, Hwy 86 Crossing	$ 78,239
Neckel Sewer Force Main, Hwy 86 Crossing	$ 63,754
Water System Hydraulic Analysis (Monterey Park Area)	$ 9,056
TOTAL DESIGN/CONSTRUCTION MANAGEMENT COSTS	**$250,816**

We thank you for the opportunity to continue working with the City of Imperial on these critical projects. Should you have any questions, please contact me at (951) 686-1070.

Sincerely,
ALBERT A. WEBB ASSOCIATES

Shane Bloomfield, P.E.
Senior Engineer

Cc: Brian Knoll, WEBB
Kris Danielson, WEBB

MANPOWER AND FEE ESTIMATE

CITY OF IMPERIAL

Proposal for Design Engineering Services for:
Claypool Force Main, Neckel Rd Water and Sewer Improvements, Water System Analysis

Task	Personnel Hours									Budget [1]
Description	Principal Engineer	Senior Engineer	Associate Engineer	Assistant Eng./Inspector	Director of Survey	Survey Technician	Project Coordinator	2-Man Survey Crew	Total Hours	Labor
Task 1 - Claypool Force Main										$ 99,767
1.1 - Lift Station Pumping Evaluation	1	2	6	0			2		11	$ 1,682
1.2 - Design (Utility Research)		1	6				8		15	$ 1,723
Design (60% Plans)	1	15	40	0			2		58	$ 9,433
Design (90% Plans & Spec.)	2	15	30	0			2		49	$ 8,073
Design (100% Plans & Spec.)	1	4	20				2		27	$ 4,260
1.3 - Process Required Permits	6	8	24				6		44	$ 7,020
1.4 - Construction Management	4	20	60				16		100	$ 15,204
1.A - Subcontractor - Survey	1		6		16	24	8	24	79	$ 12,896
1.B - Subcontractor - Inspection	4	12	0	280					296	$ 39,476
Task 2 - Neckel Waterline, Hwy 86 Crossing										$ 78,239
2.1 - Design (Utility Research)		1	6				8		15	$ 1,723
Design (60% Plans)	1	15	40	0			2		58	$ 9,433
Design (90% Plans & Spec.)	2	15	30	0			2		49	$ 8,073
Design (100% Plans & Spec.)	1	4	20				2		27	$ 4,260
2.2 - Process Required Permits	6	8	24				8		46	$ 7,168
2.3 - Construction Management	2	16	40				4			$ 9,984
2.A - Subcontractor - Survey	1		6		6	24	8	12	57	$ 8,522
2.B - Subcontractor - Inspection	4	12	0	200					216	$ 29,076
Task 3 - Neckel Sewer Force Main, Hwy 86 Crossing										$ 63,754
3.1 - Design (Utility Research)*										$ -
Design (60% Plans)	1	15	40	0			2		58	$ 9,433
Design (90% Plans & Spec.)	2	15	30	0			2		49	$ 8,073
Design (100% Plans & Spec.)	1	4	20				2		27	$ 4,260
3.2 - Process Required Permits	4	6	12				8		30	$ 4,466
3.3 - Construction Management	2	16	40				4		62	$ 9,984
3.A - Subcontractor - Survey*										$ -
3.B - Subcontractor - Inspection	2	6	0	200					208	$ 27,538
*Assumed already included in Neckel Water Line Project										
Task 4 - Water System Hydraulic Analysis (west end)										$ 9,056
3.1 - Field Pressure Readings		8	8						16	$ 2,728
3.2 - Model Calibration		4	16						20	$ 3,260
3.3 - Letter Report	2	4	12						18	$ 3,068
TOTAL BUDGET	51	226	536	680	22	48	98	36	1635	$ 250,816

[1]The amounts indicated for each individual project task are estimated budget amounts and accordingly the actual amounts may be more or less than shown. However, the total budget will not be exceeded without written authorization from the City.